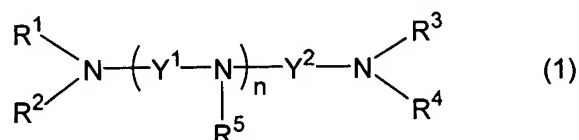


AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

1. (Currently amended): A liquid cleaner for a semiconductor substrate on which metal wiring may be provided, comprising each component of a chelating agent or a salt thereof shown by the following general formula (1), ~~an alkaline compound~~ a hydroxide of an alkaline metal and pure water, wherein pH is 8 to 13[.]



(wherein, Y¹ and Y² are lower alkylene groups, n is an integer of 0 to 4, at least 4 of R¹ to R⁴ and n R⁵s are alkyl groups having phosphonic acid group(s) and the rest are alkyl groups).

2. (Original): The liquid cleaner according to claim 1, wherein, Y¹ and Y² in the chelating agent shown by the general formula (1) are alkylene groups having 1 to 4 carbon atoms and alkyl groups in alkyl groups which may have phosphonic acid group(s) relevant to R¹ to R⁴ and n R⁵s are alkyl groups having 1 to 4 carbon atoms.

3. (Original): The liquid cleaner according to claim 1, wherein the chelating agent or a salt thereof is at least one kind selected from the group consisting of ethylenediaminetetraethylenephosphonic acid, ethylenediaminetetraethylenephosphonic acid ammonium salt, ethylenediaminetetraethylenephosphonic acid potassium salt,

Application No.: 10/534,351
Art Unit: 1796

Amendment under 37 CFR §1.111
Attorney Docket No.: 052512

ethylenediaminetetraethylenephosphonic acid sodium salt,
ethylenediaminetetraethylenephosphonic acid lithium salt,
ethylenediaminetetramethylenephosphonic acid, ethylenediaminetetramethylenephosphonic acid
ammonium salt, ethylenediaminetetramethylenephosphonic acid potassium salt,
ethylenediaminetetramethylenephosphonic acid sodium salt,
ethylenediaminetetramethylenephosphonic acid lithium salt,
diethylenetriaminepentaethylenephosphonic acid, diethylenetriaminepentamethylenephosphonic
acid, diethylenetriaminepentamethylenephosphonic acid ammonium salt,
diethylenetriaminepentamethylenephosphonic acid potassium salt,
diethylenetriaminepentamethylenephosphonic acid sodium salt,
diethylenetriaminepentamethylenephosphonic acid lithium salt,
triethylenetetraminehexaethylenephosphonic acid, triethylenetetraminehexamethylenephosphonic
acid, triethylenetetraminehexamethylenephosphonic acid ammonium salt,
triethylenetetraminehexamethylenephosphonic acid potassium salt,
triethylenetetraminehexamethylenephosphonic acid sodium salt,
triethylenetetraminehexamethylenephosphonic acid lithium salt,
propanediaminetetraethylenephosphonic acid, propanediaminetetramethylenephosphonic acid,
propanediaminetetramethylenephosphonic acid ammonium salt,
propanediaminetetramethylenephosphonic acid potassium salt,
propanediaminetetramethylenephosphonic acid sodium salt and
propanediaminetetramethylenephosphonic acid lithium salt.

4. (Cancelled)

5. (Original): The liquid cleaner according to claim 1, further comprising a buffering agent.

6. (Original): The liquid cleaner according to claim 5, wherein the buffering agent is one selected from boric acid and a good's buffer.

7. (Original): A method for cleaning a semiconductor substrate, which comprises the semiconductor substrate, on which metal wiring may be provided, is cleaned with a liquid cleaner of claim 1.

8. (New): The liquid cleaner according to claim 1, wherein the hydroxide of the alkaline metal is at least one selected from the group consisting of potassium hydroxide, sodium hydroxide and lithium hydroxide.